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Sciences Naturelles contains articles by A. Guillaud on the comparative anatomy and development of the stem in Monocotyledons, and by E. Warming on the ovule, and by Van Tieghem on the *Mucorineæ* (third paper).

ZOOLOGY.¹

TWO-HEADED SNAKES.—In reference to the two-headed snakes mentioned on pages 264 and 470 of the *NATURALIST* of the present year, I would say that there exists another specimen without locality in the collection of the Lyceum of Natural History of Williams College. In the same collection is a specimen of a five-legged frog (*Rana sp.*) from Rochester, N. Y. In this the fifth leg is situated between the two posterior pairs and just above the anus, and is in all respects as perfect as the two normal ones. The specimen is about as large as the average *R. palustris*, and, if I remember rightly, belongs to that species.

In "An Essay on the Natural History of Guiana," London, T. Becket and P. A. DeHondt, 1769, the author discourses upon the *Amphisbænæ* of that country, stating that they have a head at each extremity, and "yet, except these there is no animal in nature that is thought to have two heads;" and in a foot note on the same page (214) says: "I have received a particular description of a monstrous *Amphisbæna* found near Lake Champlain in North America by an officer in the American service, who, with one of his Majesty's draughtsmen, was sent during the late war to make a survey of that lake. They were previously informed by the Indians of the existence of these serpents, one of which they killed near a bay in Lake Champlain, which in the maps of that country has been since called Double-headed-snake bay. This serpent was a small one of the kind, it being about fifteen inches in length and largest near the middle, terminating in a slender tail. The body at the other end divided into two necks of equal size, to each of which was joined a perfect head, with two eyes, a large mouth and throat, a forked tongue, with teeth of the same species with those of the rattlesnake. The color of the heads was dark brown, and the scales on the back and side were variegated of dark and reddish-brown colors, in magnitude and disposition resembling those of the rattlesnake. This serpent was a perfect monster, of whose existence I should strongly doubt, did I not think the veracity of the gentlemen from whom I have this information, and by whom it was unquestionably killed, unquestionable."

The frontispiece of the same volume gives a figure of this same specimen, drawn by M. Park, and bearing the inscription "*Amphisbæna* or double-headed snake. This snake was found near

¹The departments of Ornithology and Mammalogy are conducted by Dr. ELLIOTT COUES, U. S. A.

Lake Champlain, in America, in the year 1761, by Lieut. Moses Park."

The figure has a lighter U-shaped mark upon the heads, and a dorsal row of rectangular spots alternating with a similar lateral row on each side, reminding one strongly of the arrangement of the squares on a checker board.—*J. S. Kingsley.*

MIMETIC COLORING IN TADPOLES.—Recently I came across a very pretty instance of imitative coloration in some tadpoles caught in a weedy pool in Cold Spring, New York. The largest tadpoles are an inch and three-quarters long, bodies half an inch long, and widest part of tail half an inch. The hind legs are visible, but very small. They are greenish above with black markings, and have minute golden spots about the eyes and along the sides; beneath they are silvery white. Their tails are orange-red for more than two-thirds the length, and the color deepens toward the end and along the margin. There are black spots and irregular lines, which are very distinct, on the margin. The largest tadpoles are more brightly and distinctly colored.

In the same pool there is a plant (*Ludovigia palustris*), whose lower leaves, which are under water, are *exactly* the same color as the tails of the tadpoles. The brightest ones are generally full of holes. The tails of the tadpoles also resemble the leaves in width and shape. The resemblance of color is so striking that a friend, who is not on the lookout for analogies, pointed out a leaf as a tadpole in the vessel where they both were placed. Some that I have had in a soup plate for several days have become very much paler, both the green and red, and the spots are almost invisible. These tadpoles show how early Batrachia begin to adapt themselves to their color-surroundings.—*Sarah P. Monks.*

FRESH-WATER MUSSELS VS. DUCKS.—In the NATURALIST for July I notice a communication from Mr. R. Ellsworth Call, in which he mentions that he has been informed that Mr. A. F. Gray has the foot of a water-fowl to which is attached a bivalve shell. Several years ago while shad-hatching for the United States Fish Commission, on the Pamunky river, near White-house landing, Va., I noticed great quantities of Unios, and in remarking on it to a gentleman residing there, was informed that it was not possible to raise ducks in that locality on their account, for at low water the ducklings were liable to be caught by the mussels and held until drowned by the rising tide.

This story was afterward confirmed by the Pamunky Indians, who live on an island below White-house, and who, with every facility for raising large quantities of ducks, do not keep them.—*Fred. Mather, Newark, N. J.*